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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON, VA 22209-3873

EXAMINER

PATEL, GAUTAM

ART UNIT PAPER NUMBER

2655

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/715,378

Applicant(s)

WAKABAYASHI ET AL.

Examiner

Gautam R. Patel

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/478,343.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>11-19-03;3-17-05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 20-27 are pending for the examination, after second preliminary amendment.

Double Patenting

2. Claim 20 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,480,447. Although the conflicting claims are not identical, they are not patentably distinct from each other because one of ordinary skill in the art would have realized that steps a and b claimed in claim 1 of the patent are not necessary for the system to function and can be removed. Claim 20 of present application is a border version of the claim 1 of instant patent. Also, although the conflicting claims are not identical, they are not patentably distinct from each other because one of ordinary skill in the art would have realized that eliminating a step or an element and its function are not patentable if the function of the step is not desired as shown in *Ex parte Wu*, 10 USPQ 2031 (Bd. Pat. App. & Inter. 1989). See also *In re Larson*, 340 F.2d 965, 144 USPQ 347 (CCPA 1965); and *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975).

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321[©] may be used to overcome an actual or provisional rejection based on a nonstatutory double

patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

As to claims 21-27, since they are also fully disclosed in the patent number 6,480,447; they are therefore considered rejected as non-statutory double patenting as set forth in the paragraphs here in above.

Claim Rejections - 35 U.S.C. § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 20-27 are rejected under 35 U.S.C. § 102(b) as being anticipated by Hayashi et al., US. patent 6,198,587 (hereafter Hayashi).

As to claim 20, Hayashi discloses the invention as claimed [see Figs. 2-7, especially 2, 3 and 7] including irradiating a laser beam, and executing an equalization processing comprising the steps of:

irradiating a laser beam [fig. 2, unit 1] on a track of the recording medium [fig. 2, unit 3] to generate a reproducing signal; and

executing an equalization processing for reducing an inter-symbol interference [col. 3, lines 27-67];

wherein the equalization processing is conducted such that the smaller an

amplitude of the reproducing signal [smaller mark size], the greater an equalization coefficient that is applied [col. 3, lines 50-67 & col. 5, lines 35-43].

NOTE: High recording density has smaller marks, which in turn produces smaller amplitude of the reproducing signal.

4. The aforementioned claim 21, recites the following steps, inter alia, disclosed in Hayashi:

the greater equalization coefficient is used for a short mark, and a smaller equalization coefficient is used for a long mark [col. 3, lines 50-67 & col. 5, lines 35-43].

5. The aforementioned claim 22, recites the following steps, inter alia, disclosed in Hayashi:

equalization coefficient changes continuously [col. 4, lines 51-55 and fig. 6].

NOTE: feedback loop changes value of "k" continuously.

6. The aforementioned claim 23, recites the following steps, inter alia, disclosed in Hayashi:

the equalization coefficient is changed dynamically during reproducing information [col. 3, line 50 to col. 4, line 30 and fig. 2, unit 24].

7. The aforementioned claim 24, recites the following steps, inter alia, disclosed in Hayashi:

executing the equalization processing using 3-tap equalization processing [fig. 3]. wherein each tap includes a plurality of selectable equalization

coefficients [col. 4, lines 1-30].

8. The aforementioned claim 25, recites the following steps, inter alia, disclosed in Hayashi:

the plurality of selectable equalization coefficient of a tap are dynamically selectable during reproducing information [col. 3, line 50 to col. 4, line 55].

9. The aforementioned claim 26, recites the following steps, inter alia, disclosed in Hayashi:

executing the equalization processing using 5-tap equalization processing, wherein each tap includes a plurality of selectable equalization coefficients. [fig. 7; col. 6, lines 40-57].

10. The aforementioned claim 27, recites the following steps, inter alia, disclosed in Hayashi:

the plurality of selectable equalization coefficient of a tap are dynamically selectable during reproducing information [col. 3, line 50 to col. 4, line 55].

Other prior art cited

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Ohsato et al. (US. Patent 5,442,615) "Optical plate".
- b. yagi et al. (US. patent 5,757,758) "Optical pickup".

- c. Kim (US. patent 5,781,521) "Optical disk ..."
- d. Takahashi (US. patent 6,141,168) "Automatic calibration".

Contact Information

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Wayne Young can be reached on (571) 272-7582.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.

Gautam R. Patel
Primary Examiner
Group Art Unit 2655


GAUTAM R. PATEL
PRIMARY EXAMINER

July 10, 2005